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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/625,352 | 07/23/2003 | Steven D. Clark | NOR / 1119 | 8607 |

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EXAMINER

DEL SOLE, JOSEPH S

ART UNIT PAPER NUMBER

1722

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/625,352 | CLARK, STEVEN D. | |
| | Examiner | Art Unit | |
| | Joseph S. Del Sole | 1722 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-24 and 32-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32-34 is/are allowed.
- 6) ☒ Claim(s) 1,6,8 and 12-15 is/are rejected.
- 7) ☒ Claim(s) 2,4,5,7,9-11 and 16-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 15 is objected to because of the following informalities: "from said first row of the first row of the first plurality" should be changed to --from said first row of the first plurality--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Schrenk (3,687,589).

An apparatus for distributing material supplied from inlets in a cross-machine direction (Fig 1);

a first linear flow equalizer including a first plurality of flow passageways of substantially equal path length that extend in the cross-machine direction and in a downstream direction, the plurality of flow passageways cooperating to divide a flow of a thermoplastic material supplied from the plurality of liquid inlets into individual streams having a spaced relationship in the cross machine direction (Fig 1, #s 30 and 31);

a forming member positioned in the downstream direction from the linear flow equalizer, the forming member having a concavely surface oriented in the cross-machine direction and positioned relative to the plurality of flow passageways for

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merging the individual streams exiting from the plurality of flow passageways (Fig 1, #24).

4. Claims 1, 6, 8, 12, 13, 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakunaga et al (4,732,716).

An apparatus for distributing material supplied from inlets in a cross-machine direction (Fig 4);

a first linear flow equalizer including a first plurality of flow passageways of substantially equal path length that extend in the cross-machine direction and in a downstream direction, the plurality of flow passageways cooperating to divide a flow of a thermoplastic material supplied from the plurality of liquid inlets into individual streams having a spaced relationship in the cross machine direction (Fig 4, the pathways of either #46 or #47);

a forming member positioned in the downstream direction from the linear flow equalizer, the forming member having a concavely surface oriented in the cross-machine direction and positioned relative to the plurality of flow passageways for merging the individual streams exiting from the plurality of flow passageways (Fig 4, #s 48 and 49);

a linear flow equalizer for distributing thermoplastic material supplied to a spin pack of a meltspinning apparatus having a cross-machine direction;

an inlet plate (Fig 4, #44) having a plurality of flow passageways spaced substantially equidistantly from each other in the cross-machine direction;

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a first equalizer plate (Fig 4, #42) positioned downstream from the inlet plate and having a first plurality of elongated slots each centered about an out of a corresponding one of the plurality of liquid passageways, each of the first plurality of elongated slots capable of receiving a flow of the material from the corresponding one of the plurality of flow passages; each one of the first plurality of elongate slots extending in the cross-machine direction and including opposed closed ends substantially equidistant from one of the plurality of liquid passageways;

a second equalizer plate (Fig 4, #43) positioned downstream from the first equalizer plate, the second equalizer plate having a first plurality of throughholes each substantially registered in alignment with one of the opposed closed ends of a corresponding one of the first plurality of elongated slots, each of the first plurality of throughholes capable of receiving the flow the of the thermoplastic material from a corresponding one of the first plurality of slots, and the first and second equalizer plates cooperating to divide the thermoplastic material supplied from the plurality of flow passageways into individual streams having a spaced relationship in the cross-machine direction;

a forming member positioned in the downstream direction from the second equalizer plate, the forming member having a concavely curved surface positioned in the cross-machine direction and positioned relative to the plurality of flow passageways for merging the individual streams exiting from the plurality of flow throughholes (Fig 4, #s 48 and 49);

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the first plurality of elongated slots and throughholes are arranged in substantially parallel first and second rows in the cross-machine direction (Fig 4);

the first surface is concavely curved for intercepting the first thermoplastic material exiting from the first row of the first plurality of throughholes, and the forming member further comprising a second concavely-curved surface positioned for intercepting the first thermoplastic material exiting from the second row of the first plurality of throughholes.

Allowable Subject Matter

5. Claims 32-34 are allowed.
6. Claims 2, 4, 5, 7, 9, 10, 11 and 16-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed 1/13/06 have been fully considered but they are not persuasive.

The issues brought up by the Examiner that did not pertain to art rejections have all been addressed and overcome. The Examiner notes however that a new issue has arisen as discussed above.

The Examiner notes that many of the previous art rejections have been overcome as discussed by the Applicant; such overcome rejections are those that have not been repeated herein.

The Applicant argues that Schrenk fails to disclose or suggest a “plurality of flow passages of substantially equal path length that extend in the cross-machine direction and in a downstream direction, said plurality of flow passageways operating to divide a flow of a first thermoplastic material supplied from the plurality of liquid inlets into individual streams having a spaced relationship in the cross-machine direction” and that instead passageways 30 and 31 of Schrenk extend only in a downstream direction.

The Examiner disagrees. As recited by claim 1 and broadly interpreted by the Examiner the existence of multiple passageways that exist, relative to each other, in the machine direction demonstrate that Schrenk teaches the claimed invention. The plurality of passageways extend in the cross-machine direction because the plurality extend in such a direction relative to one another.

The Applicant argues that Sakunaga et al fails to disclose passageways of substantially equal path length.

The Examiner disagrees. Substantially equal is not the same as equal and the passageways, if not of equal length, are of substantially equal length.

The Applicant argues that passageways of Sakunaga receive different materials.

While this may be true, such use of Sakunaga to distribute different materials rather than the same material does not differentiate Sakunaga from the claimed invention.

The Applicant argues that the gathering holes of Sakunaga do not merge the individual stream exiting from the passageways.

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The Examiner disagrees. Figure 4 shows that the gathering holes do merge the individual streams and this is supported at lines 47-61 of column 3. The Examiner notes that Applicant's claim 1 does not include a recitation to forming a sheet.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

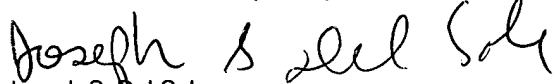
Correspondence

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joseph S. Del Sole whose telephone number is (571) 272-1130. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the Examiner by telephone are unsuccessful, Mr. Duane Smith can be reached at (571) 272-1166. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for both non-after finals and for after finals.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from the either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

A handwritten signature in cursive script, appearing to read "Joseph S. Del Sole".

Joseph S. Del Sole
January 26, 2006